

## **II      Amendments to the Claims**

Please cancel claims 1-20 without prejudice. Please enter new claims 21-37. Below is a complete listing of all of the claims of the application showing the status of each:

Claims 1–20.            (canceled)

Claim 21.    (new) A method for grafting an unsaturated monomer onto a polysaccharide comprising the steps of: (1) forming a mixture comprised of an unsaturated monomer and a water soluble or water dispersible polysaccharide; (2) irradiating the mixture with an amount of electron beam radiation sufficient to form an unsaturated monomer-water soluble or water dispersible polysaccharide graft copolymer which is depolymerized relative to the ungrafted polysaccharide.

Claim 22.    (new) The method of claim 1, wherein the unsaturated monomer is a vinyl monomer having a functional group.

Claim 23.    (new) The method of claim 1, wherein the polysaccharide is selected from the group consisting of guar, cationic guar, nonionic guar, locust bean gum, tara gum, amylose, amylopectin, xanthan and xanthan gum.

Claim 24. (new) The method of claim 2, wherein the polysaccharide is guar.

Claim 25. (new) The method of claim 2, wherein the polysaccharide is a modified cellulose.

Claim 26. (new) The method of claim 2, wherein the functional group is a carboxylate, a phosphonate, or a sulfonate group.

Claim 27. (new) The method of claim 2, wherein the vinyl monomer is methacrylamidopropyltrimethylammonium chloride.

Claim 28. (new) The method of claim 2, wherein the functional group is a quarternary ammonium group.

Claim 29. (new) A polysaccharide grafted with an unsaturated monomer, said grafted polysaccharide being dispersible in water.

Claim 30. (new) The grafted polysaccharide of claim 9, wherein the polysaccharide is selected from the group consisting of modified cellulose, galactomannan and xanthan.

Claim 31. (new) The grafted polysaccharide of claim 10, wherein the polysaccharide is a modified cellulose.

Claim 32. (new) The grafted polysaccharide of claim 9, wherein the unsaturated monomer is a vinyl monomer.

Claim 33. (new) The grafted polysaccharide of claim 12, wherein the vinyl monomer is selected from a carboxylated vinyl monomer, a sulfonated vinyl monomer, a phosphonated vinyl monomer and a quarternary ammonium vinyl monomer.

Claim 34. (new) The grafted polysaccharide of claim 13, wherein the vinyl monomer contains a quarternary ammonium group.

Claim 35. (new) The grafted polysaccharide of claim 9, wherein the polysaccharide is selected from the group consisting of guar, cationic guar, nonionic guar, locust bean gum, tara gum, xanthan gum and amylose.

**PATENT**

Serial No. 10/607,079

Filing Date: June 25, 2003

Examiner

Art Unit

Attorney Docket No. Rhodia.02036 US

Claim 36. (new) The grafted polysaccharide of claim 9, wherein the polysaccharide is selected from the group consisting of guar and hydroxypropyl guar.

Claim 37. (new) A cosmetic composition comprising the grafted polysaccharide of claim 9.